

The spleen, besides being large, was of a waxy consistence, in which was an irregular portion of the parenchyma converted into a bloodless mass, of a whitish or whitish-yellow colour in the centre, and grayish-white towards the circumference. The thyroid gland contained old and fresh tubercles, and the end of the ileum and the cæcum were slightly ulcerated. Moreover, cicatrices of the gums, throat, and vagina were found. On microscopical examination, the amyloid degeneration was found to have proceeded in the walls of some of the hepatic bloodvessels, but not at all in the parenchyma of the liver. In the wax-like part of the spleen, the cells, the trabecular work, and the bloodvessels, this degeneration had taken place to an extreme degree, and the central white part was found to owe its colour to much finely granular fat, the result of fatty degeneration of the areolar-tissue-corpuscles of the trabecular work. In the kidneys much amyloid degeneration of the vessels and glomeruli existed, and this was the case also with the bloodvessels of the uterus, the uterine and vaginal mucous membrane, the heart, &c.; but in the muscular structure of the heart and uterus, in the vessels of the lungs and brain, &c., this change had not gone on. This change was also found in the minute bloodvessels of the intestinal mucous membrane, and slightly in those of the stomach; also in the villi of the small intestines, and to an excessive degree in the above-mentioned ulcers of the intestines, which appeared to be destructive processes set up as a result of degeneration of the nourishing bloodvessels. The authors here allude to a case of almost entire deficiency of the intestinal villi in a case of amyloid degeneration, related in another place,<sup>1</sup> and also one related by Beckmann,<sup>2</sup> in which destruction of the mucous membrane of the intestine existed to a great extent. They look upon the case above related as an instance of amyloid degeneration, in connection with an inveterate syphilitic taint, such as have been already noticed.<sup>3</sup> A review is then made of several theories entertained by Virchow, Bush, Donders, Moleschott, Nægele, &c., as to the chemical nature of the so-called amyloid substance, and especial reference to that of Meckel, that the blue substance yielded by the addition of iodine and sulphuric acid is owing to cholesterine, a view shown by Virchow to be untenable. Allusion is also made to the negative results obtained in various attempts to convert this amyloid substance into sugar. The paper closes by the description of a chemical analysis of portions of the spleen, which were found to consist almost exclusively of amyloid substance, enabling the authors to come to the following conclusions, at any rate, with regard to the amyloid substance there formed, viz., that although a large quantity of cholesterine is contained, yet this is by no means the cause of the iodine or sulphuric acid reaction; also that the waxy spleen contains no bodies which chemically resemble either amyloïd or cellulose. The so-called amyloid substances appear to be only modified and altered albuminous material.—*Brit. and For. Med.-Chir. Rev.*, Oct. 1860, from *Virchow's Archiv*, Bd. xvi. Heft 1, 2.

3. *On the Conversion of Cysticercus Cellulose into Tania Solium.* By Dr. KUCHENMEISTER.—Some time since Dr. Küchenmeister having fed a delinquent with measly pork three days prior to his death, found several young tæniæ attached to the intestinal canal, and Leuckert has since related a case of death from the same cause. But, as there are still incredulous persons, the author resolved to institute other experiments on the person of a criminal condemned to death. The pork containing the cysticerci was administered on November 24, 1859, and January 18, 1860, and the post-mortem was made on March 31. Almost fifty per cent. of the cysticerci were found in the condition of tapeworms. His general conclusions are: 1. The numbers of the tænia which were found must convince the most incredulous of the reality of the conversion. 2. That the tænia really resulted from the cysticerci administered is seen from so many being still in an immature state. 3. The presence of so many examples delayed the development. In ordinary cases a quarter of a year would suffice for maturity to be attained. 4. Even under the most favourable circumstances, when the cysticerci are freed of their envelopes, one-half undergo no conversion, and

<sup>1</sup> Virchow's Archiv, Band xi. s. 391.<sup>2</sup> Ibid., Band xiii. s. 97.<sup>3</sup> Ibid., Band xi. s. 393, and Band xiii. s. 498 and s. 500.

swallowed unseparated the proportion would be still less. 5. Raw, measly pork may be exposed to considerable cold without the cysticerci losing their vitality. 6. In weather which is not hot enough to induce early putrefaction, the susceptibility of development can be retained for at least eight days, and probably for a longer period after the death of the pig. 7. The greater the number of the raw cysticerci that are consumed, the greater number of tæniæ will be found. In one case in which such food was largely consumed, thirty-three portions of heads were found. 8. In persons leading a quiet life, avoiding all excess in eating and drinking, and partaking of a uniform diet, even many of these worms may not give rise to any disturbances in the system. This prisoner, between the time of eating the cysticerci and his excretion, was remarkably well in health, a considerable increase in the deposit of fat taking place. 9. Notwithstanding the quantity of separated proglottides at the lower portion of the intestinal canal, the muscles contained no cysticerci. This man, however, had no vomiting, and none of the embryos of the tæniæ entered the stomach, which, according to the author's investigations, is a necessary preliminary to the appearance of cysticercus in man. 10. The worms were found very firmly adherent in part to the free surface of the intestine, or at the sides of the valvulæ conniventes, and in part buried between these last. They could only be detached with great difficulty, and when the heads were loosened from one portion of the intestine, they at once fastened on to another with just as much force. 11. This explains why a means which, in some cases, acts very efficaciously in expelling the worms, in other cases proves of less avail. Thus, when the head is attached to the free surface of the intestine, or of the valvulæ, sharp purgatives will detach it; but, when placed at the base of the valvulæ, the effect of the purgatives may be only to bury it still deeper, and when the body is expelled without the head, the worm may be reproduced. When the head of the worm has become detached from the intestine, we must not allow it time to re-attach itself; and these medicinal agents alone, which induce powerful peristaltic action, and are accompanied by abundant secretion, are to be relied upon for procuring a radical cure. 12. Finally, the author replies to the reproaches which have been directed against him for his experimental feeding of condemned criminals. He maintains that, as a curable disease only had been produced, the man, even in the event of his having been pardoned, would have sustained no permanent mischief. He declares that, by employing active purgation by means of pomegranate extract, prepared as directed in his work on Parasites, he has never failed in expelling the worm. A further excuse for the experiment is derived from the fact that, owing to the regularity of diet observed by the criminal, and the absence of all excesses likely to give rise to vomiting, there was no possibility of the proglottides obtaining an entrance into the stomach, and becoming thence diffused amidst other of the structures.—*Med. Times & Gaz.*, Oct. 27, from *Deutsche Klinik*, No. 20.

4. *Bodies resembling Spermatozoa from the Urine of a Woman*.—These bodies were found by Dr. Beale in the urine of a patient of Mr. Caesar Hawkins's, in St. George's Hospital. Many of the organisms were exactly like spermatozoa, and might certainly have been mistaken for them; but on examination of a number of specimens, it became evident that they were really vegetable organisms. This fact is one of great interest and importance with reference to questions of supposed rape. Dr. Beale had never before met with structures liable to be mistaken for spermatozoa.—*Brit. and For. Med.-Chir. Rev.*, Oct. 1860, from *Beale's Archives*, No. 3, p. 251.

## MATERIA MEDICA AND PHARMACY.

5. *On the Physiological and Therapeutical Properties of the Peroxide of Hydrogen*.—Dr. RICHARDSON read before the Medical Society of London (Oct. 15, 1860) a paper on this subject. The peroxide of hydrogen, which was dis-